AF2609 Foundation Engineering 7.5 credits

Grundläggningsteknik och geokonstruktioner

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

The Built Environment

Specific prerequisites

Documented knowledge in soil mechanics or foundation engineering. And structural mechanics, structural engineering in at least total 12 ECTS points corresponding to the content in courses AF1601 or AE1106 and AF1005.

Eng B/6 according to the Swedish upper secondary school system.

Intended learning outcomes

Upon completion of the course, the student shall be able to:

- Design ground improvement with focus on deep mixing,
- Design pile foundations,
- Design sheet pile walls,
- Evaluate bearing capacity for foundations on rock,
- Write a geotechnical design report.

Course contents

- Geotechnical investigations
- Ground improvement, with focus on dry deep mixing
- Piling
- Retaining walls with focus on sheet pile walls
- Foundations on rock
- Soil reinforcement

Examination

- ÖVN1 - Exercise, 3.0 credits, grading scale: P, F
- TEN1 - Examin, 4.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.